



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Tuesday, May 29, 2018

WELL WORK PLUGGING PERMIT
Vertical Plugging

EQT PRODUCTION COMPANY
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for 3-A
47-007-00989-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: 3-A
Farm Name: WALDECK, JOHN
U.S. WELL NUMBER: 47-007-00989-00-00
Vertical Plugging
Date Issued: 5/29/2018

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

7-00989A

WW-4B
Rev. 2/01

1) Date May 10, 20 18
2) Operator's
Well No. 160761 A. Waldeck #3A
3) API Well No. 47-007 - 00989

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ___ / Gas X / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production ___ or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 1102 Watershed Big Bull Run
District Otter County Braxton Quadrangle Cedarville 7.5'

6) Well Operator EQT Production Company 7) Designated Agent Jason Ranson
Address 2400 Ansys Drive- Suite 200 Address 120 Professional Place
Canonsburg PA 15317 Bridgeport WV 26330

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Danny Mullins Name HydroCarbon Well Service
Address 220 Jack Acres Road Address PO Box 995
Buckhannon WV 26201 Buckhannon WV 26201

10) Work Order: The work order for the manner of plugging this well is as follows:
See Attachment for details and procedures.

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Environmental Protection

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Danny Mullins Date 5-14-18

PLUGGING PROGNOSIS

Waldeck, J. 3-A (160761)
 Braxton Co. WV
 District, Otter
 API # 47-007- 00989

BY: Craig Duckworth
 DATE: 12/14/17

CURRENT STATUS:

8 1/4" csg @ 199' (60 sks)
 4 1/2" csg @ 2342'

Elevation @ 1102'

TD: 2360'

Fresh Water @ 59' Coal @ None Reported
 Saltwater @ None Reported
 Gas shows @ 2254'
 Oil @ None Reported
 Perforated @ 2216'-2252'

1. Notify State Inspector, **Danny Mullins 304-546-8171**, 48 hrs. Prior to commencing operations.
2. Check TD w/wireline
3. TIH w/tbg to 2340', set 200' C1A cement plug from 2340' to 2140'. (Gas show @ 2254')
4. TOO H w/tbg to 2140' gel hole 2140' to 1500'.
5. TOO H w/tbg, Free point 4 1/2" csg, cut csg @ free point, TOO H w/csg.
6. Set 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
7. TIH w/tbg to 1560' set 200' C1A cement plug from 1560' to 1360', (4 1/2" csg cut @ 1500'est.
8. TOO H w/tbg to 1360' gel hole 1360' to 1150'.
9. TOO H w/tbg to 1150', set 100' C1A cement plug 1150' to 1050'. (elevation @ 1102').
10. TOO H w/tbg to 1050' gel hole from 1050' to 700'.
11. TOO H w/tbg to 700, set 100' C1A cement plug, 700' to 600' (Safety Plug) 260')
12. TOO H w/tbg to 600' gel hole from 600' to 250'.
13. TOO H w/tbg to 250, set 250' C1A cement plug, 250' to 0' (8 1/4" csg @ 199' cem 60 sks)

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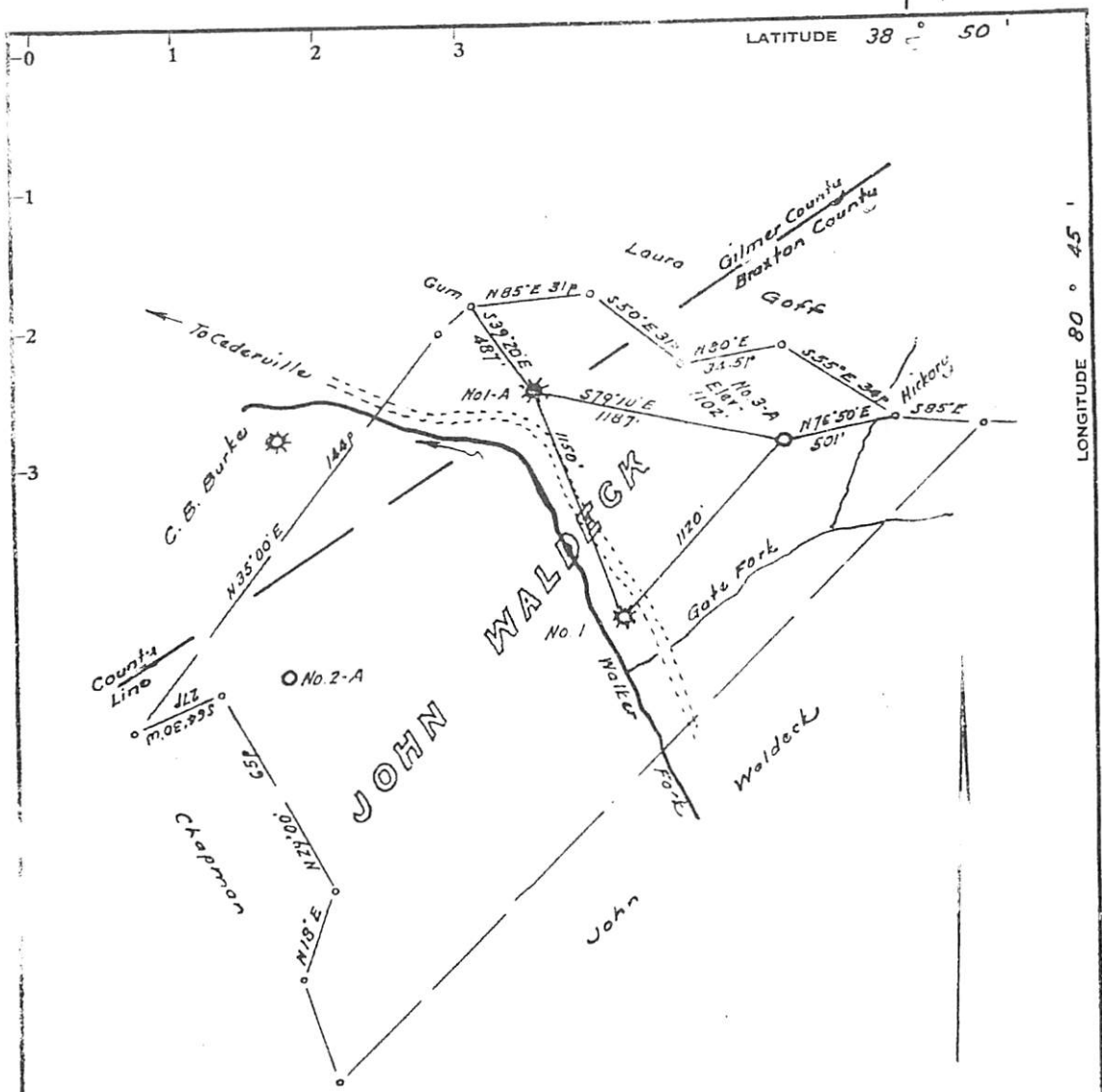
14. Erect monument with API#, Date plugged, EQT
15. Reclaim location and road to WV-DEP specifications.

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6/14/71



DM

Minimum Error of Closure 1 in 200
 Source of Elevation Elevation Well No. 1-A = 940

- Fracture
- New Location
- Drill Deeper
- Abandonment

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: W. Stoltz Jr.
 Squares: N S E W

Company Waco Oil & Gas Co.
 Address P.O. Box 4, Glenville, W. Va.
 Farm John Waldeck
 Tract _____ Acres 148.33 Lease No. _____
 Well (Farm) No. 3-A Serial No. _____
 Elevation (Spirit Level) 1102
 Quadrangle Glenville
 County Braxton District Otter
 Engineer W. Stoltz Jr.
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date June 10, 1971 Scale 1" = 400' = 660'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. BRAX - 989

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

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 WV Department of Environmental Protection

7-00989P

Form OG-10



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DEC 14 1971

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION

- Rotary []
Oil & Gas Division []
Cable Tools []
Storage []

Location: Glenville
Permit No. BRAX-989

WELL RECORD

Oil or Gas Well: Both (KIND)

Company: Waco Oil & Gas Co.
Address: Box 4 Glenville, W. Va.
Farm: John Waldeck
Location: Big Bull Run
Well No. 3-A
District: Otter
County: Braxton
The surface of tract is owned in fee by John Waldeck
Address: Cedarville, W. Va.
Mineral rights are owned by Same
Address:
Drilling commenced: 6-20-1971
Drilling completed: 6-23-1971
Date Shot:
With:
Open Flow: /10ths Water in Inch
/10ths Merc. in Inch
Volume: 60,000 Cu. Ft.
Rock Pressure: lbs. hrs.
Oil: bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS):
WELL FRACTURED (DETAILS): 1000 bbl. water - 60,000# 20/40 Sand - 500 gal. acid
RESULT AFTER TREATMENT (Initial open Flow or bbls.): 2 Million Cubic feet plus show oil 2,000,000
ROCK PRESSURE AFTER TREATMENT: 400 HOURS: 12
Fresh Water: 59 Feet. Salt Water:
Producing Sand: Big Injun Depth: 2216 to 2252

Table with columns: Casing and Tubing, Used in Drilling, Left in Well, Packers. Includes data for sizes 16, 13, 10, 8 1/4, 6 1/4, 5 3/16, 4 1/2, 3, 2 and packer sizes 199, 199, 2216, 2252.

Attach copy of cementing record.
CASING CEMENTED 4 1/2 SIZE 2342 No. Ft. 6/23/71 Days
Amount of cement used (bags): 100
Name of Service Co.: Dowell
COAL WAS ENCOUNTERED AT None FEET INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

Main well log table with columns: Formation, Color, Hard or Soft, Top, Bottom, Oil, Gas or Water, Depth, Remarks. Shows formations from top soil to slate and gas production at 2254 feet.

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7-00989 P

WW-4A
Revised 6-07

1) Date: May 10, 2018
2) Operator's Well Number
160761 A. Waldeck #3A
3) API Well No.: 47 - 007 - 00989

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>See Attached</u>	Name <u>N/A</u>
Address _____	Address _____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>See Attached</u>
(c) Name _____	Address _____
Address _____	Name _____
	Address _____
6) Inspector <u>Danny Mullins</u>	(c) Coal Lessee with Declaration
Address <u>220 Jack Acres Road</u>	Name _____
<u>Buckhannon WV 26201</u>	Address _____
Telephone <u>(304) 546-8171</u>	

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator EQT Production Company
 By: Erin Spine *[Signature]*
 Its: Regional Land Supervisor
 Address 2400 Ansys Drive, Suite 200
Canonsburg PA 15317
 Telephone (304) 848-0035

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Office of Oil and Gas
MAY 18 2018
WV Department of
Environmental Protection

Subscribed and sworn before me this 16 day of May 2018
Rebecca L. Wanstreet Notary Public
My Commission Expires 4-7-2020

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

47-007-00989

160761 Waldeck #3A

Owner(s) (Surface and Access)

Frank L Waldeck and Judy C Stout et al
3330 Jones Rd.
Diamond OH 44412

Carmella Waldeck
177 High Point Drive
Cedarville WV 26611

Coal Owner(s):

Blackhawk Land and Resources LLC
c/o Deutsche Bank AG NY Branch
60 Wall St. NYC 600266
New York NY 10005

Potential Water Owner(s):

Carmella Waldeck
177 High Point Drive
Cedarville WV 26611

Frank L Waldeck and Judy C Stout et al
3330 Jones Rd.
Diamond OH 44412

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160761 Waldeck #3A

Owner(s) (Surface and Access)

Frank L Waldeck and Judy C Stout et al
3330 Jones Rd.
Diamond OH 44412

Carmella Waldeck
177 High Point Drive
Cedarville WV 26611

**Not originally listed as access road owner. We have a lease that allows us to use her surface to access the well head for plugging purposes.

Coal Owner(s):

Blackhawk Land and Resources LLC
c/o Deutsche Bank AG NY Branch
60 Wall St. NYC 600266
New York NY 10005

Potential Water Owner(s):

Carmella Waldeck
177 High Point Drive
Cedarville WV 26611

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WW-9
(5/16)

API Number 47 - 007 - 00989
Operator's Well No. 160761 A. Waldeck #3A

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code _____

Watershed (HUC 10) Big Bull Run Quadrangle Cedarville 7.5'

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: Formation Fluids

Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20 ml

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: _____

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. _____

-If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used in drilling medium? _____

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. _____

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) _____

-Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]

Company Official (Typed Name) Erin Spine

Company Official Title Regional Land Supervisor

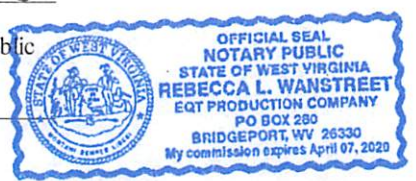
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MAY 18 2018
WV Department of Environmental Protection

Subscribed and sworn before me this 10 day of May, 20 18

Rebecca L. Wanstreet

Notary Public

My commission expires 4-7-2020



Proposed Revegetation Treatment: Acres Disturbed 1± Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type (10-20-20) or equivalent

Fertilizer amount 1/3 ton lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Aslike Clover	5	Aslike Clover	5
Annual Rye	15		

DM

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____

Comments: _____

Title: _____

Date: _____

Field Reviewed? () Yes () No

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EQT Production Water plan
Offsite disposals

Waste Management - Meadowfill Landfill

Rt. 2, Box 68 Dawson Drive
Bridgeport, WV 26330
304-326-6027
Permit #SWF-1032-98
Approval #100785WV

Waste Management - Northwestern Landfill

512 E. Dry Road
Parkersburg, WV 26104
304-428-0602
Permit #SWF-1025 WV-0109400
Approval #100833WV

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Topo Quad: Cedarville 7.5' Scale: 1" = 200'

County: Braxton Date: April 13, 2018

District: Otter Project No: 40-02-00-07

47-007-00989 WV 160761 (A. Waldeck #3A)

Topo

Pit Location Map



47-007-00989
WV 160761



Existing Well
Access Road



NAD 27, South Zone
N:668070.21
E:2064634.98

WGS 84
LAT:38.834528
LONG:-80.772931
ELEV:1017.38

LEGEND



Proposed Pit Location



SURVEYING AND MAPPING SERVICES PERFORMED BY:

ALLEGHENY SURVEYS, INC.

1-800-482-8606
237 Birch River Road
Birch River, WV 26610
PH: (304) 649-8606
FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

2400 Ansys Drive
Canonsburg, PA 15317

Topo Quad: Cedarville 7.5' Scale: 1" = 500'

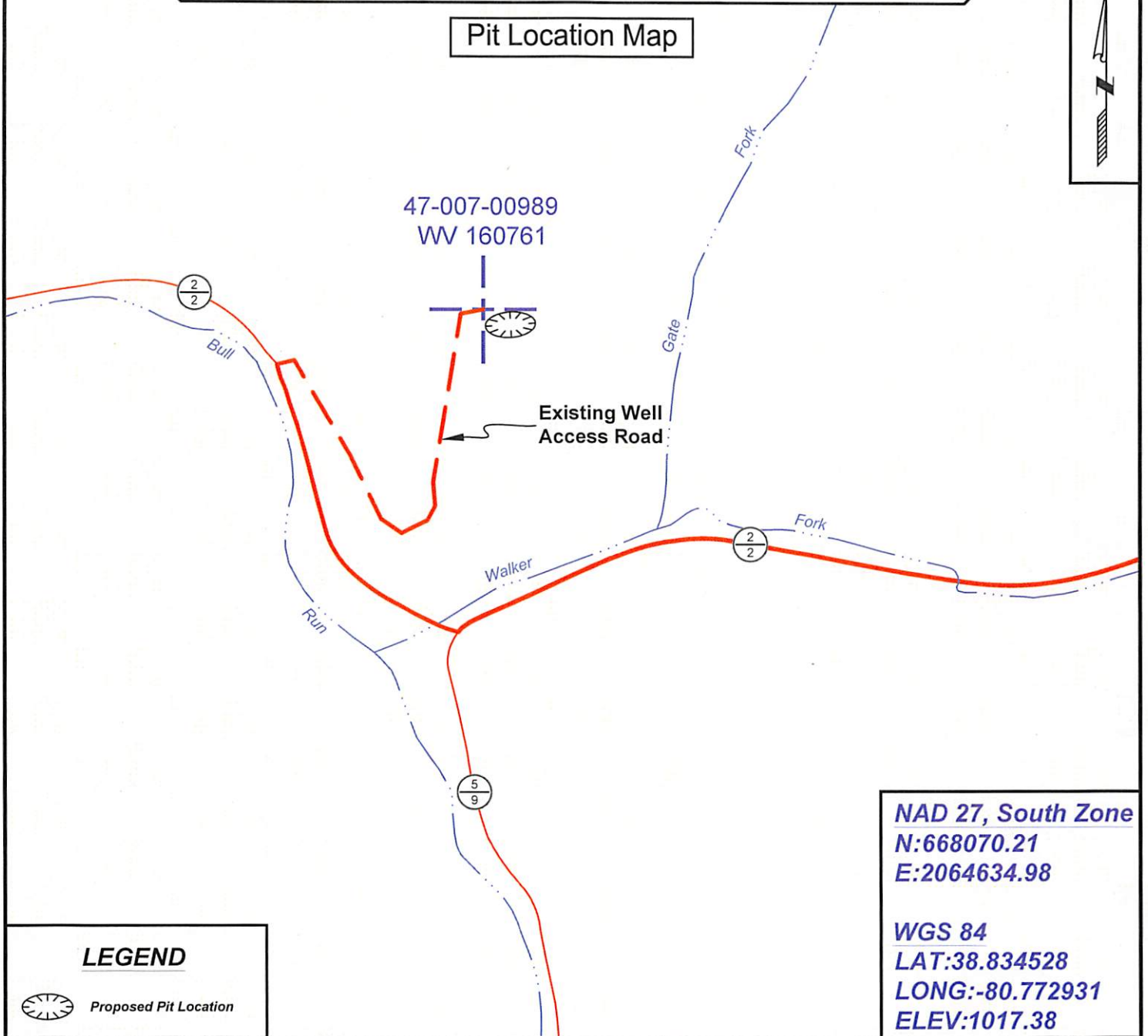
County: Braxton Date: April 13, 2018

District: Otter Project No: 40-02-00-07

Highway

47-007-00989 WV 160761 (A. Waldeck #3A)

Pit Location Map



NAD 27, South Zone
N:668070.21
E:2064634.98

WGS 84
LAT:38.834528
LONG:-80.772931
ELEV:1017.38

LEGEND

Proposed Pit Location



SURVEYING AND MAPPING SERVICES PERFORMED BY:

ALLEGHENY SURVEYS, INC.

1-800-482-8606
 237 Birch River Road
 Birch River, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

2400 Ansys Drive
 Canonsburg, PA 15317

4700700989P



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY

LEASE NAME AND WELL No. A. Waldeck #3A - WV 160761 - API No. 47-007-00989

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 678 +/- Owner: Carmella Waldeck

Address: 177 High Point Drive, Cedarville, WV 26611 Phone No. _____

Comments: Water Well

Site: 2 Spacing: 800 +/- Owner: Carmella Waldeck

Address: 177 High Point Drive, Cedarville, WV 26611 Phone No. _____

Comments: _____

BIRCH RIVER OFFICE

237 Birch River Road
Birch River, WV 26610
phone: 304-649-8606 fax: 304-649-8608

BRIDGEPORT OFFICE

172 Thompson Drive
Bridgeport, WV 26330
phone: 304-848-5035 fax: 304-848-5037

ALUM CREEK OFFICE

P.O. Box 108 • 1413 Childress Road
Alum Creek, WV 25003
phone: 304-756-2949 fax: 304-756-2948

47 007 00989P

Topo Quad: Cedarville 7.5' Scale: 1" = 2000'

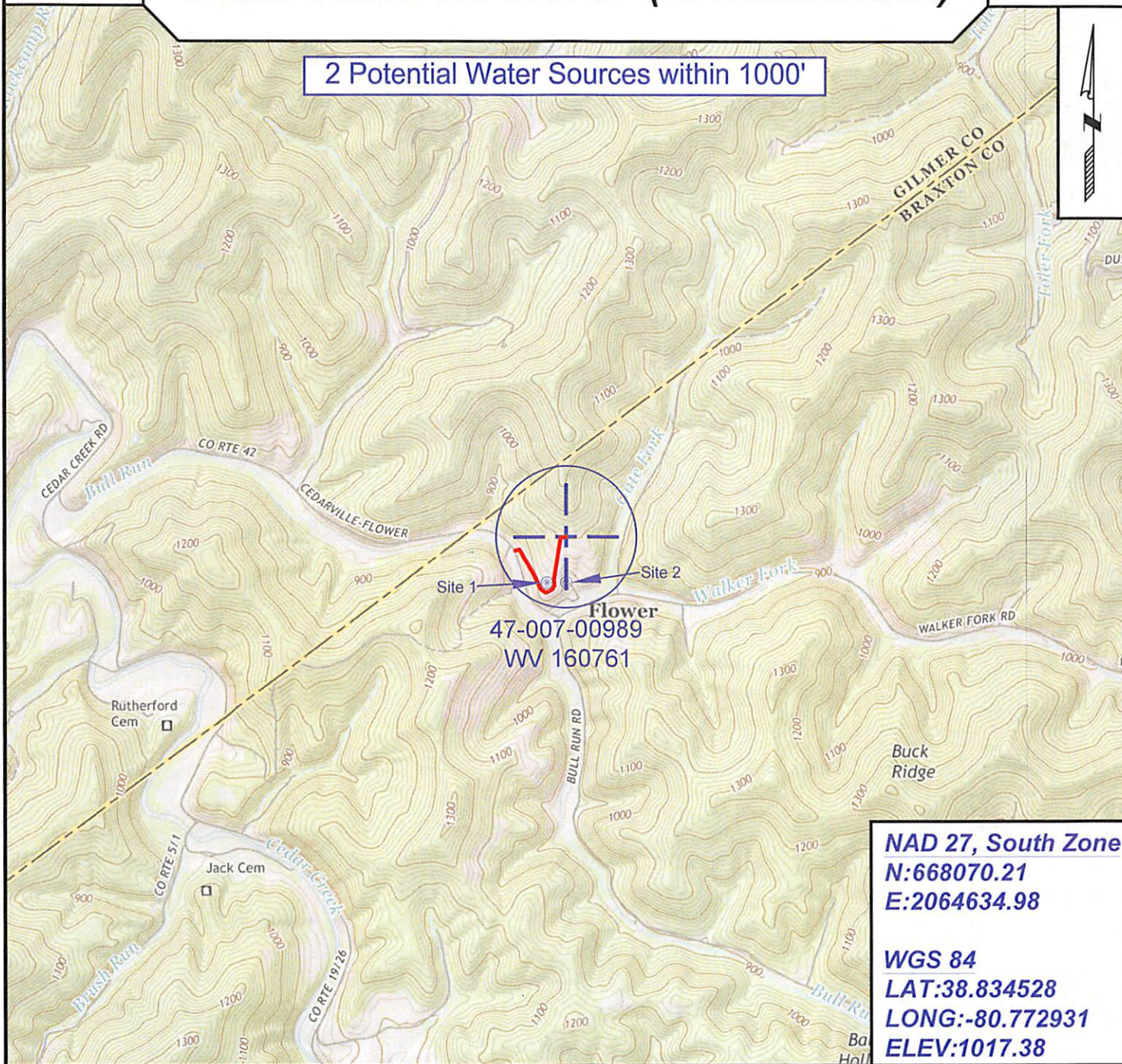
County: Braxton Date: April 13, 2018

District: Otter Project No: 40-02-00-07

Water

47-007-00989 WV 160761 (A. Waldeck #3A)

2 Potential Water Sources within 1000'



NAD 27, South Zone
N:668070.21
E:2064634.98

WGS 84
LAT:38.834528
LONG:-80.772931
ELEV:1017.38



SURVEYING AND MAPPING SERVICES PERFORMED BY:

ALLEGHENY SURVEYS, INC.

1-800-482-8606
237 Birch River Road
Birch River, WV 26610
PH: (304) 649-8606
FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

2400 Ansys Drive
Canonsburg, PA 15317

WW-7
8-30-06

4700700989P



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-007-00989 WELL NO.: WV 160761 (A. Waldeck #3A)

FARM NAME: John Waldeck

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Braxton DISTRICT: Otter

QUADRANGLE: Cedarville 7.5'

SURFACE OWNER: Frank L. Waldeck & Judy C. Stout, et al.

ROYALTY OWNER: Daniel J. Cain, et al.

UTM GPS NORTHING: 4298439

UTM GPS EASTING: 519708 GPS ELEVATION: 310 m (1017 ft)

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS _____ : Post Processed Differential _____
Real-Time Differential _____
Mapping Grade GPS X : Post Processed Differential X
Real-Time Differential _____

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.


Signature

PS # 2180
Title

4/27/18
Date